Remarks

Claims 1-21 and 30-31 are in the application, of which claims 1, 7, 13, and 15 are in independent form. Claims 1-4, 7-10, 13-15, and 17-18 are amended to address rejections made under 35 U.S.C. § 112 and to clarify the invention. Claims 30 and 31 are new. No new matter is added via the claim amendments.

Claim Objections

The OA objects to claims 2, 7, and 14 for various informalities. Claims 2, 7, and 14 have been amended as suggested at page 2 of the OA.

Claim Rejections – 35 U.S.C. § 101

Claims 7-11 stand rejected for being directed to non-statutory subject matter. Applicants respectfully traverse the rejection and request reconsideration based on the following remarks.

Contrary to the allegation in the OA at page 3, the fact that method steps could be performed manually does not remove a method from the ambit of statutory subject matter. *See, for example, In re Bilski*, 545 F.3d 943, 950 (Fed. Cir. 2008) (not rejecting or making any statement regarding the Board of Patent Appeals and Interferences' assertion that a method reciting manually performed steps is clearly a statutory transformation when a physical transformation occurs).

The method steps recited in claim 7 result in physical transformations and are not all capable of mental execution. For example, the step of "marking-up a document according to a schema, ..." cannot be performed mentally as it is not possible for a person to think about marking-up either an electronic or paper document and have such a document become marked-up. Likewise, "generating a user-requested document..." cannot be performed mentally. Such a generated document is physically created, for example, on an electronic display screen or printed on paper or other suitable medium.

Claim 7 thus meets the requirements for statutory subject matter under 35 U.S.C. § 101 as interpreted by current federal case law. Applicants respectfully request the Office to reconsider and withdraw the statutory subject matter rejection.

Claim Rejections – 35 U.S.C. § 112

Claims 18-21 stand rejected for failing to comply with the written description requirement. Applicants respectfully traverse the rejection and request reconsideration based on the following remarks.

The Manual of Patent Examining Procedure provides "[t]he claims as filed in the original specification are part of the disclosure..." and the specification can be amended if needed to include the claimed subject matter. MPEP § 2163.06 (III). Here, claims 18-21 were filed in the original specification. And, the specification does not need to be amended because it already contains a written description of the claimed matter contained in claims 18-21 at page 6, lines 16-32. One of ordinary skill in the art would clearly understand the inventors had possession of the inventions claimed in claims 18-21 based on the original claim language and the disclosure contained at page 6, lines 16-32. Applicants respectfully request the Office to reconsider and withdraw the written description rejection.

Antecedent Basis Rejections

Claims 1-3, 6, 7, 9, 10, 12, 13, and 15 are amended to address the antecedent basis issues raised in the OA at pp. 4-6.

Claim 1 recites a "document format store for storing formats." Because "formats" are stored in a "document format store" there is antecedent basis for "said formats" in claim 4.

References to "said transmitted document" in claims 16 and 17 clearly refer to the "generated customer-requested formatted document" after transmitting it in the last step recited in claim 15. There is therefore proper antecedent basis for "said transmitted document."

Claim 15 positively recites both "a customer order" and "a customer." There is therefore proper antecedent basis for these terms in claims 18-21 which depend from claim 15. In claim 19 "said customer's" tells us which customer's (the one recited in claim 15) geographical location is being considered. There is therefore proper antecedent basis.

Claim Rejections – 35 U.S.C. § 102

Claims 1-4 and 7-10 stand rejected as anticipated under 35 U.S.C. § 102(e) by U.S. Patent No. 7,035,837 of Reulein et al. Applicants respectfully request reconsideration and withdrawal of such rejections based on the amendments to the claims and the following arguments.

With respect to claim 1, the OA at 7 alleges Reulein et al. discloses "a repository for storing documents in a marked-up form according to one or more mark-up schemas adapted to make explicit the structural information contained a document." Applicants disagree. While Reulein et al. discloses storing documents and document components, *see* col. 2, lines 24-26 and col. 3, lines 19-27, Reulein et al. does not disclose or suggest "… each marked-up document having *explicit structural information corresponding to implicit structural information* contained in a corresponding unmarked-up document" (emphasis added) as recited in amended claim 1. Specifically, the document repository 106 disclosed by Reulein et al. contains documents and document "components" in XML format (see col. 3, line 25), and published documents "preferably in PDF format" (see col. 4, line 17). While PDF and XML are structured document formats, there is no discussion in Reulein et al. regarding a "corresponding unmarked-up document" that has "implicit structural information" to which the explicit structures in the PDF document or the XML component corresponds. In other words, Reulein et al. discloses a repository for <u>assembled</u> original documents and document components. In contrast, amended claim 1 recites a repository for <u>marked-up</u> documents with markings that correspond to structural information implicitly contained in a previously existing document. The advantage of a marked-up transformation that makes previously implicit structure explicit in the marked-up document is described at page 4, lines 1-6 of applicants' specification:

> … textual structural information is retained such that a coherent copy can be produced. For example, the line breaks in a poem are vital to its integrity as a document. The application of a schema makes the structural information implicit in a document become 'explicit'. There is a schema for each 'class' of document. A non-exhaustive list of classes includes: novel, technical text, engineering text, history text, and so on.

In addition, Reulein et al.'s document repository 106 is not "a document store for storing formats" (emphasis added). Rather, as discussed above, repository 106 stores documents and components. In claim 1, note that one of the stored "formats" is used by the claimed "document production processor" to generate a user-requested document. In contrast, Reulein et al.'s documents are generated "in a variety of industry standard formats including postscript, PDF, HTML, and metacode," see col. 4, lines 38-40, none of which are "formats" stored in the document repository 106.

For the above reasons, Reulein et al. does not disclose or suggest the limitations recited in amended claim 1. Applicants respectfully request the Office to reconsider and withdraw the rejection of claim 1.

Claims 2-4 depend from claim 1 and recite additional unique limitations. For at least these reasons, applicants respectfully request the Office to reconsider and withdraw the rejection of claims 2-4.

Turning to claim 7, at page 9 the OA alleges Reulein et al. discloses "marking-up a document according to a schema that makes explicit the structural information contained in said document." Claim 7 is amended, similar to claim 1, and recites "marking-up a document according to a schema, the marked-up document having explicit structural information corresponding to implicit structural information contained in a corresponding unmarked-up document." For the reasons discussed above with respect to claim 1, Reulein et al. does not disclose or suggest "… the marked-up document having *explicit structural information corresponding to implicit structural information* contained in a corresponding unmarked-up document" (emphasis added) as recited in amended claim 7. Additionally, in Reulein et al., the documents are assembled from components (col. 3, line 34) and then <u>validated</u> before publication against a Document Type Definition (DTD) (see col. 4, lines 20-22) which specifies certain formatting requirements the assembled document must meet. Any other formatting Reulein et al. discloses for a document comes from a set of style specifications applied during document printing. *See* col. 4, lines 35-38. There is therefore no disclosure in Reulein et al. of an unmarked-up document that has "implicit structural information" that corresponds to the "explicit structural information" of an assembled document.

Amended claim 7 recites "… a user-selected format …" As discussed above, Reulein et al. does not disclose or suggest formats.

For the above reasons, Reulein et al. does not disclose or suggest the limitations recited in amended claim 7. Applicants respectfully request the Office to reconsider and withdraw the rejection of claim 7.

Claims 8-10 depend from claim 7 and recite additional unique limitations. For at least these reasons, applicants respectfully request the Office to reconsider and withdraw the rejection of claims 8-10.

Claim Rejections – 35 U.S.C. § 103

Claims 5 and 11 stand rejected as obvious under 35 U.S.C. § 103 over Reulein et al. in view of U.S. Patent Pub. No. 2002/0065852 of Hendrickson et al. Applicants respectfully request reconsideration and withdrawal of such rejections based on the amendments to the claims and the following arguments.

Before addressing the claims, applicants initially point out that Reulein et al. and the present application each address two completely different document problems. Reulein et al. addresses the problem of how to assemble new customized documents using existing documents or portions of existing documents. The example provided in Reulein et al. at columns 11-13 is illustrative, and describes creating a new health insurance form using components from previously existing forms. Reulein et al.'s solution is a system that stores documents and document components in an XML format and converts the stored XML documents and document components to editable word processor files when a user creates a new document. *See* col. 3, lines 19-24. A set of rules is applied to the documents and document components to ensure they are correctly assembled into the type of business document the user desires to create. *See* col. 3, lines 33-36.

The present application teaches how to print documents with a format that a person with a visual or reading impairment can read. Embodiments disclosed in the present application address the problem of creating documents that a person with a visual or reading impairment can read using systems and methods for creating and storing documents marked-up with explicit structural information that is based on implicit structural information from a

corresponding original document. *See* p. 3, line 34 to p. 4, line 31. As described in the specification, structural information may include one or more of paragraph breaks, line breaks, blank lines, document sections and subsections, etc. *Id.* Various formats, such as specialized underlining, word emphasis, etc., may also be created and stored. *See* p. 8, line 13 to p. 12, line 9. A person with a visual or reading impairment selects a document to read and a desired format in which to read it. The corresponding marked-up document is then used to generate a copy of the document having the selected format so the person can read the generated document. *See* p. 4, line 33 to p. 6, line 6. The explicit structural information in the marked-up document is used when generating the selected document so the generated document has the structural information implicit in the original. In other words, the generated document includes the selected format and retains the structural character of the original document. *See* the abstract.

Turning now to the claims rejected under 35 U.S.C. § 103, applicant notes that claim 5 depends from claim 1 and claim 11 depends from claim 7. As discussed above, Reulein et al. does not disclose all of the limitations recited in independent claims 1 or 7. Hendrickson et al. does not make up the deficiencies noted above with respect to Reulein et al.

Additionally, Hendrickson et al. does not disclose or suggest one or more of the formats recited in claims 5 and 11. Hendrickson et al. merely discloses changing resume styles, *i.e.*, layouts, and making changes such as font size, font type, or line spacing. *See* Hendrickson et al. at ¶ 27. Such changes are a far cry from the special formatting styles recited in claims 5 and 11 (*e.g.*, variable paragraph or word shapes, variable paragraph spacing, variable character height, etc.), which are designed to assist persons with vision or reading disabilities read selected documents.

For the above reasons, Reulein et al. in view of Hendrickson et al. does not make claims 5 or 11 obvious. Applicants respectfully request the Office to reconsider and withdraw the rejection of claims 5 and 11.

Claims 6 and 12 stand rejected as obvious under 35 U.S.C. § 103 over Reulein et al. in view of U.S. Patent Pub. No. 2002/0111963 of Gebert et al. Applicants respectfully request reconsideration and withdrawal of such rejections based on the amendments to the claims and the following arguments.

Claim 6 depends from claim 1 and claim 12 depends from claim 7. As discussed above, Reulein et al. does not disclose all of the limitations recited in independent claims 1 or 7. Gebert et al. does not make up the deficiencies noted above with respect to Reulein et al. For at least this reason, applicants respectfully request the Office to reconsider and withdraw the rejection of claims 6 and 12.

Claims 13-21 stand rejected as obvious under 35 U.S.C. § 103 over Reulein et al. in view of U.S. Patent Pub. No. 2002/0019786 of Gonzalez et al. Applicants respectfully request reconsideration and withdrawal of such rejections based on the amendments to the claims and the following arguments.

Regarding independent claims 13 and 15, amended claim 13 recites "… each marked-up document having explicit structural information corresponding to implicit structural information contained in a corresponding unmarked-up document, a document format store for storing formats, …" In a similar vein, amended claim 15 recites "…each marked-up document having explicit structural information corresponding to implicit structural information contained in a corresponding un-marked-up document; …" and "applying a customer-selected format containing said formatting information to said marked-up document; …" For the reasons discussed above with respect to similar limitations in claims 1 and 7, Reulein et al. does not disclose or suggest the quoted limitations in claims 13 and 15. Gonzalez et al. does not make up the deficiencies noted above with respect to Reulein et al.

Applicants therefore respectfully request the Office to reconsider and withdraw the rejection of claims 13 and 15.

Claim 14 depends from claim 13. As discussed above, Reulein et al. in view of Gonzales et al. does not disclose or make obvious all of the limitations recited in independent claim 13. For at least this reason, applicants respectfully request the Office to reconsider and withdraw the rejection of claim 14.

Claims 16-21 depend from claim 15. As discussed above, Reulein et al. in view of Gonzales et al. does not disclose or make obvious all of the limitations recited in independent

claim 15. For at least this reason, applicants respectfully request the Office to reconsider and withdraw the rejection of claims 16-21.
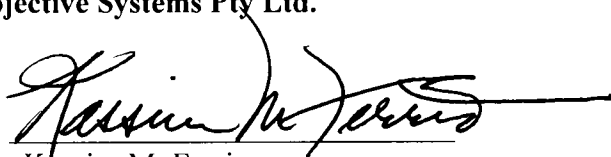
Applicants believe the application is in condition for allowance and respectfully request the same.

The Commissioner is hereby authorized to charge any fees which may be required in connection with filing of this paper, or credit overpayment, to Deposit Account No. 19-4455.

Respectfully submitted,

Objective Systems Pty Ltd.

By _____

Kassim M. Ferris
Registration No. 39,974

STOEL RIVES LLP
900 SW Fifth Avenue, Suite 2600
Portland, OR 97204-1268
Telephone: (503) 224-3380
Facsimile: (503) 220-2480